THE CITY OF SAN DIEGO

MANAGER'S REPORT

DATE ISSUED: January 14, 2004 REPORT NO. 04-005

ATTENTION: Honorable Mayor and City Council
Docket of January 20, 2004

SUBJECT: Proposed Emergency Regulatory Revisions to the Building Code Resulting from the Cedar Fires

SUMMARY

Issue(s) –

(1) Should the City Council modify the Municipal Code to require roofing assemblies on all buildings to have a Class "A" fire-resistance rating instead of the current Class "B" only required for single family dwellings? and
(2) Should the City Council modify the Municipal Code to prohibit the use of wood shake or wood shingle roof coverings whether fire retardant treated or not? and
(3) Should the City Council modify the Municipal Code to require additional standards and life-safety systems for buildings and structures located within proximity of High Fire Hazard Areas?
(4) Should the City Council approve a revision to the Fire Miscellaneous Items fee schedule? and
(5) Should the City Council approve the hiring of 3.00 additional staff in Development Services for the High Fire Hazard Mitigation Program?
(6) Should the City Manager accelerate the replacement and upgrade of poly butylene water services in the fire impacted areas of the Scripps Ranch and Tierrasanta communities to facilitate the installation of residential fire sprinkler systems? and
(7) Should the City Manager develop a base monthly water fee schedule for Single Family Residences for approval by the City Council, that allows such customers to increase meter and service sizes without incurring a corresponding base fee increase if the increased water meter and service size is due solely to the installation of a required fire sprinkler system.

Manager's Recommendation(s) –

(1) Amend Section 145.0202 of the Municipal Code to require a Class "A" roofing assembly for all new buildings, and throughout the roof of all existing buildings where more than 25 percent of the total roof area is replaced over a twelve month period.
(2) Amend Section 145.0202 of the Municipal Code to prohibit the use of wood shake or wood shingle roof coverings on all new roofs, and to require the removal and replacement of all wood roof coverings within 25 years. The entire roof of all existing buildings covered with wood roof covering is required to be replaced with a Class "A" roofing including no wood coverings where more than 25 percent of the total roof area is replaced over a twelve month period.
(3) Add a new Division 5 to Chapter 14 Article 5 of the Municipal Code to require additional fire resistant building materials and fire safety systems for all buildings subjected to fire hazards adjacent to High Fire Hazard Areas.
(4) Approve the hiring of 3.00 additional positions in the Building Development Review Division of the Development Services Department for the High Fire Hazard Mitigation Program; approve the revision to the fee schedule; and direct the City Manager to include additional positions in the FY 2005 annual budget.
(5) Direct the City Manager to take the necessary actions to accelerate the replacement and upgrade of poly butylene water services in the fire impacted areas of the Scripps Ranch and Tierrasanta Communities to facilitate the installation of residential fire sprinkler system. and
(6) Direct the City Manager to develop a base monthly water fee schedule for Single Family Residences for approval by the City Council that allows such customers to increase meter and service sizes without incurring a corresponding base fee increase if the increased water meter and service size are due solely to the installation of a required fire sprinkler system.

Fiscal Impact:

(1) Administration of the Building and Fire Codes is based upon a fee for service paid for by applicants in the development process. It is expected that there will be a workload increase in the plan review and inspection for the installation of fire sprinkler systems, and other proposed building standards, which are required by this ordinance, since the regulations affect an estimated 1,175 small residential buildings that are currently exempt from these regulations.

Staffing increase of 3.00 positions (2.00 Fire Prevention Inspector II and 1.00 Fire Prevention Supervisor) in FY 05 will be required in the New Construction – Fire Plan Check and Inspection Section of Development Services. The positions will staff the High Fire Hazard Mitigation Program. The cost of $295,050 will be recovered through the combination of existing fees and the new fees requested as part of this action. These positions will be requested as part of the FY 2005 proposed budget submitted for City Council consideration

(2) The cost to the Water Department to replace and upgrade water services and meters in the impacted areas is estimated to be $3.3 million. When the department goes forward to bid, an action will be taken to authorize funding from the Water Fund 41500 Capital Improvement Program (Project No. 75-925 Annual Allocation for Water Service and Meter Replacements) and the Unallocated Reserve as required.

Housing Affordability Impact: The proposed regulations have a minor effect on the cost of housing. The change in regulations will increase costs for the processing, review, and inspection of residential development projects.

(1) Requirements adjacent to "High Fire Hazard Areas": The total additional cost impact after considering the impact of the building regulations, and the new fee, to buildings located adjacent to High Fire Hazard Areas is approximately $20,000 and amounts to a 6 to 7% increase to the construction valuation or 3.9% to the purchase price.
(2) Roof covering requirements City wide: It is expected that there will be a minimal cost impact due to the city wide Class "A" roofing assembly requirement. Most popular roof coverings, other than wood roof coverings, can be incorporated into listed Class "A" roofing assemblies.

BACKGROUND

On Monday December 8, 2003 the City Manager presented the Initial 30-day "Cedar Fire After Action Overview Report." (CMR-03-242). As a result of the recommendations provided in the Report, the City Council directed the Manager to bring forward proposed changes in the Building and Fire Codes to increase the fire safety of new construction.

The "Cedar Fire After Action Report" was in response to a wildland brush incident that began on October 25, 2003. This incident resulted in 335 structures being destroyed and 71 structures damaged. The damage figures recorded for the fire are $135,973,838 for structures and $67,986,919 for contents.

The topography, limited rainfall, exposure to Santa Ana conditions, and vegetation of San Diego combine to create an area with a high risk from wild fires. An additional factor is that there is no defensible space between the city and numerous other jurisdictions including Mexico. This means there is nothing to prevent a wildfire/firestorm from spreading into the City like in the case of the Cedar Fire.

A vegetation map exhibit produced by the Development Services Department (Attachment No. 3) identifies large areas of the City where the potential for high fire hazards exist. Additionally, the exhibit shows a broad scatter of canyons and vegetation that appear in most if not all the communities that form the City of San Diego. The Chief of the Fire-Rescue Department has voiced publicly his concern that had the Santa Ana

winds not calmed in the way that they eventually did, the Cedar Fire would have raced towards the ocean through La Jolla. Additionally, the City of San Diego has limited or no control over brush management activities in adjacent jurisdictions and south of the US International border.

Budgetary constraints over the past 10 years have limited the staffing of City brush management operations on City land and open space, and on brush management enforcement by the Fire-Rescue Department on private property. Additionally, environmental concerns and constraints have also impacted the process of brush management in areas of sensitive vegetation and habitat.

The following report outlines the City Manager's proposed code changes as developed by the City Manager, Fire-Rescue, and the Development Services Departments. The building regulations were developed based on an extensive review and evaluation of the following codes, methods and data:

a) A review of nationally recognized codes such as the 2003 International Urban-Wildland Interface Code.
b) A review of regulations from other California jurisdictions such as the County of San Diego, City of Burbank, City of San Bernadino, etc.
c) Use of fire science and engineering judgment to calibrate the proposed regulations to issues unique to the topography, vegetation and size of the City of San Diego
d) A review of damage assessments collected by the Fire-Rescue Department.
e) Reports and findings published on past wildland fires.
f) Lessons learned from the Cedar Fire and recommendations of the Fire Chief.

The proposed building regulations have been developed concurrently with a limited outreach effort with key stakeholders including the Building Industry Association, and the San Diego Roofing Contractors Association.

DISCUSSION

1. Roof covering issues:

Roof Covering Requirements in the California Building Code:

Chapter 15 of the 2001 California Building Code (CBC) regulates roof covering requirements for all buildings and is enforced in conjunction with the building code amendments published in Section 145.0202 of the Municipal Code. There are three distinctly different types of roof coverings considered by the building code:

a) A classified fire retardant roofing assembly.
b) A non-rated roofing assembly.

c) A non-combustible roof covering.

Roofing assemblies come in three categories of fire resistance. The building code defines a roofing assembly to include the roof deck, substrate or thermal barrier, insulation, vapor retarder, underlayment, interlayment, base plies, roofing plies, and roof covering that is assigned a roofing classification.

All roof coverings can be installed to meet the requirements for Class A roofing assembly. The least effective to most effective classes of roofing assemblies are:

a) Nonrated. Nonrated roof coverings provide no protection against fire exposure. Under such exposures, non-rated roof coverings are readily flammable. In the event of a fire on the roof, the fire will extend downward into the attic and threaten the entire building and it will also threaten surrounding buildings and vegetation by producing flying brands that could ignite structures or vegetation a considerable distance away.
b) Class “C”. Class “C” roofing assemblies are effective against light fire test exposures. Under such exposures, roof coverings of this class are not readily flammable, afford a measurable degree of fire protection to the roof deck, do not slip from position and are not expected to produce flying brands.
c) Class “B”. Class “B” roofing assemblies are effective against moderate fire test exposures. Under such exposures, roof covering of this class are not readily flammable, afford a moderate degree of fire protection to the roof deck, do not slip from position and are not expected to produce flying brands.
d) Class “A”. Class "A” roofing assemblies are effective against severe fire test exposures. Under such exposures, roof coverings of this class are not readily flammable, afford a high degree of fire protection to the roof deck, do not slip from position, and are not expected to produce flying brands.

A non-combustible roof covering is one where no part will ignite and burn when subjected to fire. The building code identifies the following materials to be non-combustible: Cement shingles or sheets; exposed concrete slab roof; ferrous or copper shingles or sheets; slate shingles; clay or concrete roofing tiles. Asphalt shingles, built up roofs and rolled roofing on flat roofs do not satisfy the non-combustibility requirement.

The CBC requires single family residential buildings to have a minimum Class “C” roofing assembly. Additionally, the 1997 Uniform Building Code, which is adopted and amended by the State of California and published as the 2001 California Building Code, allows a non-rated roof covering on single family dwellings. San Diego’s Municipal Code amendments to the building code however require the roofing assembly protecting single family homes to have a Class “B” or better rating. Assemblies incorporating wood shakes or wood shingles satisfying this requirement are not permitted. This requirement first appeared in the Municipal Code as an amendment to the 1998 California Building

Code and was carried forward during the adoption of the 2001 California Building Code which became effective November 1, 2002.

Class "A" Roofing Assembly Required Throughout the City:

Observations in the aftermath of the Cedar Fire, and past wildfires in California, reveal that homes covered with Class "A" roofing assemblies fare much better than homes covered with other roofing assemblies.

While 127 homes covered with tile roof coverings, or asphalt singles, were destroyed, it is assumed based on the limited data available that the source of the destruction was not a failure of the roofing system. Empirical data point to unprotected eaves, as well as exposed void spaces between barreled roofing tiles and the plywood underlayment, that permitted burning embers to enter attic spaces and to ignite the plywood underlayment. There was no indication of a failure in the roofing assembly.

A Class "A" roofing assembly is subjected to the most severe burning brand test that uses a 12" by 12" by 2 ¼" high simulated brand weighing 4 lbs. The Cedar Fire caused flying debris the size of wood 2 by 4 studs that ignited both adjacent structures and vegetation.

A Class "A" roofing assembly, therefore, provides a higher level of protection without a tremendous increase in cost and if imposed Citywide, would provide protection from future fire events.

Wood Shake And Wood Shingle Roof Covering Ban Throughout The City:

Observations in the aftermath of the Cedar Fire in both the City of San Diego and the County of San Diego, as well as the City of Poway, reveal that homes covered with materials other than wood roof coverings fared much better than homes which were covered with wood shake or wood shingle roofs. 203 homes covered with wood shake or wood shingle roofs were destroyed or severely damaged in the City of San Diego during the Cedar Fire. In the Harmony Grove Fire of 1996, the Carlsbad Fire Marshal observed that 51 of the 54 homes that burned had wood shake roofs. Similar observations regarding roofing material were made in the aftermath of the 1991 Oakland Hills Fire and the 1993 wildland fires that ravaged Southern California. More than twice as many homes covered with wood roof coverings failed when compared to buildings which were covered with tile roofs.

The proposed City wide ban on wood roofs is based on reasons similar to those for requiring the Class "A" roofing assembly. The prevalence of canyons and vegetated open spaces expose a large population of older existing buildings, as well as newer buildings to the immediate impacts of the wildland fire hazard.

Furthermore, existing wood roofs expose the dry vegetation in the open spaces to a fire hazard in the event a home catches fire.

The current proposal to ban wood roof coverings is not unique to the City of San Diego. Many jurisdictions including the City of Los Angeles and Orange County have had wood roof covering bans in effect for several years. Locally the City of Carlsbad, the City of El Cajon, the City of Del Mar and the City of Vista prohibit the use of wood roof coverings.

Roofs on buildings located adjacent to High Fire Hazard Areas:

While satisfying a Class "A" requirement, tile roofs in particular, are excellent materials in repelling external fire hazards. They come in differing varieties and can be made of clay, regular weight concrete and light weight concrete. Light weight concrete tiles are the most popular in projects involving the replacement of roof coverings on existing buildings covered with asphalt shingles, wood shakes or wood shingles. Non-combustible roof coverings when incorporated as a part of a roofing assembly provide an additional level of safety for buildings located adjacent to High Fire Hazard Areas as regulated in the proposed ordinance.

Cost impact of proposed roof covering requirements:

The cost of roofing assemblies includes both the material cost of the roofing assembly, as well as the cost of delivery and installation on the building. Additionally the weight of the selected roof covering dictates the cost of the structural system required to support the required roof loads.

City staff, through the assistance of local roofing contractors that are members of the San Diego Roofing Contractors Association, were able to develop costs estimates for various roof replacement examples (Attachment No. 4). Factors such as experience, specialization, insurance and bonding, safety awareness and control over workers compensation insurance claims as well as many company specific factors affect the quoted price. Every attempt was made at obtaining a reasonable, objective and representative cost.

The Development Services Department will continue the current practice of not requiring a Building Permit for most roof replacement projects and as a result there is no permit fee required.

2. Fire Resistant Construction And Safety Systems In Areas Adjacent To High Fire Hazard Areas:

A new Division 5 is being proposed in Chapter 14 Article 5 of the Municipal Code to accomplish the following:

a) To consolidate into the building regulations all the required minimum fire resistant and architectural construction requirements for structures located adjacent to High Fire Hazard Areas. The regulations currently reside in the fire code and the landscape regulations.
b) To update the existing regulations based on a review of nationally available codes, codes from other similar California jurisdictions and evaluation of issues and items brought forward by the Fire Chief and elected officials.

The proposed requirements will be more restrictive than those currently published in the construction requirements of item (d) in the Brush Management regulations in Municipal Code Section 142.0412. The requirements currently require the addition of 10 more feet to brush management Zone 1 if the buildings subject to the regulations do not include the following three items:

> *(1) Roof material shall be fire retardant. Wood shake shingles, whether fire retardant treated or untreated, are not permitted.*
> *(2) Walls, eaves, and overhangs shall be one-hour, fire-resistive.*
> *(3) Eave vents shall be covered with wire screen not to exceed 1/4-inch mesh.*

The requirements in Division 5 are intended to supplement the fire and life-safety protections required in the adopted building code. The building code regulations protect occupants in buildings from hazards within the building or, from fire hazards in adjacent buildings or structures. The building code roof covering and exterior construction requirements are designed to protect against the effects of light or average hazards from fires in adjacent buildings and structures where it is assumed the fire and rescue services can respond in a timely fashion. The building code regulations do not account for unique local climactic and topographic conditions that create fire hazards from/to vegetation in High Fire Hazard Areas

The proposed regulations are aimed at protecting structures from the effect of wildland fires from adjacent High Fire Hazard Areas as well as protecting the dry combustible vegetation in the High Fire Hazard Area from adjacent structure fires. The requirements are intended to function in conjunction with the separate brush management requirements in the landscape regulations of Chapter 14 in the Municipal Code.

The regulations are designed for the unique exposures of buildings located immediately adjacent to the brush management zones, and to buildings located on lots within 300 feet of lots directly adjacent to the High Fire Hazard Areas.

The proposed fire resistant building materials and fire safety systems are intended to reduce the amount of combustible construction materials on the exterior portions of buildings, to minimize the intrusion of embers into the building through exterior openings and attic ventilation openings and to provide protection

due to an ember intrusion. The requirements also provide some protection to hazardous vegetation from an out of control fire involving an adjacent structure. The proposed standards include the following:

a) A non-combustible roof covering that is a part of a Class "A" roofing assembly.
b) A sprinkler system throughout residential buildings including attic spaces and garages connected to the building.
c) Glazed doors and windows with dual pane glazing. Skylights glazed with dual pane glass.
d) Boxed eaves to be protected with fire resistant materials and control on eave ventilation location and size.
e) Limitations on the size and orientation of attic ventilation openings.
f) Spark arrestors on all chimneys and flues.
g) Non-combustible gutters and downspouts.

The non-combustible roof covering requirement restricts combustible materials from the roof covering on buildings located adjacent to the High Fire Hazard Areas. The requirement also provides for the most durable of roof coverings and is in addition to the Class "A" required throughout the City. The regulations also address void spaces at the eaves of roofs covered with barrel tile roofing materials that can permit burning brands to enter and ignite the plywood underlayment.

The sprinkler system proposed provides for an additional level of protection to the structure in the event a burning brand entered the building through exterior openings. Sprinkler protection is being required throughout attached garage spaces, attics spaces and throughout the building for buildings subject to the proposed regulations. Additionally, the sprinkler system will be effective in controlling a residential structure fire and will minimize exposure to the adjacent dry vegetation that can be ignited due to a structure fire. The sprinkler system will "buy time" at a reasonable cost with benefits to the homeowner, neighboring buildings and potentially the entire neighborhood located adjacent to a High Fire Hazard Area.

Dual glazing is required on all glazed openings to limit the amount of radiant heat that enters the building and igniting interior combustibles such a drapes, combustible window blinds, etc. Regular plate glass often breaks due to rapid changes in temperature, or bombardment by windblown projectiles. Once the window collapses, flames and burning embers have easy access into the interior of a house reducing the probability of its being saved.

Dual glazing is required in skylights to prohibit popular combustible domed plastic skylights. The dual glazing will be tempered and will provide a stronger glazing material that can limit radiant heat from entering the building and igniting contents.

Boxed eaves provide a dropped ceiling covered with one-hour fire resistant non combustible coverings, typically plaster stucco. The horizontal framing will provide a soffit that prevents the entrapment of heat and products of combustion along building eaves. Control of attic ventilation orientation away from the High Fire Hazard Area is intended to minimize entry of burning brands. Dormer vents are preferred since they are non-combustible, have downward pointing vanes with additional mesh behind them and are typically located higher up the roof and further away from property lines. Eave vents are prohibited.

Openings into under floor spaces for crawl space ventilation or access are regulated in like fashion to attic ventilation openings.

The building code requires spark arrestors but only regulates chimneys associated with fireplaces opening into the building. The new requirement addresses other types of fuel burning appliances.

Non-combustible gutters and downspouts are required to eliminate a source of ignition at the critical transition point between the roof covering edge and the plywood underlayment below.

Accessory structures such as fences, decks, patio covers, solariums, playhouses, gazebos, and palapas are required to be constructed of non-combustible material. This requirement eliminates combustible materials from the vicinity of the building and is consistent with the brush management regulations. Damage assessments and reports by academic investigators from UC Berkeley, indicate that many wood fences and structures in yards caught fire and ignited adjacent unprotected eaves. These observations were made on lots not immediately adjacent to the hazardous areas as well as some lots immediately adjacent to the hazard. It is believed ~~is~~ that burning brands caused the ignition.

Garage doors are required to be constructed of non-combustible material. The reason for this requirement is to reduce the possibility of burning embers igniting large garage door surfaces, especially those facing the hazardous area.

Cost impact.

The sprinkler cost issues addressed in the following section of the report were compiled by an informal survey of local sprinkler contractors and verified through input from building inspection staff and a home builder. The data obtained varied greatly, especially the cost impact of the required backflow prevention device. Every attempt was made to provide an objective and possibly conservative cost impact of the proposed requirement.

It is expected that the cost of the proposal to require a fire sprinkler system will add approximately $9,000 for a typical 3,000 sq ft home which is 3.14% of the

approximate construction valuation of $286,500 or 1.76% of the $511,342 average price of a detached single family home.

The cost impact of requiring a non-combustible Class "A" roofing assembly will increase the cost of the average 3,000 sq ft home by $5,800 above the cost of an average Class "A" asphalt shingle roofing assembly. The cost impact of the remaining high hazard requirements will minimally impact the cost of housing since most of the required construction features are currently implemented as a part of current practice.

The total estimated cost impact from the proposed requirements on new buildings located adjacent to high hazard areas is approximately $20,000, 6 to 7% increase in the construction valuation or 3.9% increase to the average new home purchase price.

3. Water System Impacts:

Installation of a residential fire sprinkler system requires that individual customer water services and meters be increased in size to accommodate a greater water demand in the event of a fire. Although existing water mains, fire hydrants, and other water delivery and supply facilities are sized to accommodate fire fighting needs, single family residential water services are not. Typical single family residences are served by a ¾- inch water meter and a one-inch service. A sprinkler system installation will require replacing and upgrading the water meter and service ranging from at least a 1-inch to a 2-inch service and meter, depending on the extent of the sprinkler system and local water pressure levels.

Costs associated with upgrading the meters and services have been historically incurred solely by the customer. The removal cost of the old meter and service line ranges up to $894 per service. The installation of larger or new facilities ranges between $2,478 and $2,866 depending on the size of the required service and meter (typically a 1-inch to 2-inch meter and service). In some instances, when there is an existing standard 1-inch service connection, only a meter upgrade would be necessary at a net cost of $86.

Additionally, the associated base monthly water fees, charged regardless of water usage amounts, would increase. As of January 1, 2004, the base fee for a typical single family residence with a ¾-inch meter is $11.93 per month compared to $12.75 for a 1- inch meter, $57.04 for a 1/1/2 – inch meter, and $87.81 for a 2-inch meter.

The following measures are deemed to be consistent in meeting the Water Department's objectives and can be undertaken to facilitate the installation of the residential fire sprinkler systems.

Water Service and Meter Replacement and Upgrade : The Water Department has a limited program for the early replacement of water services constructed of a polybutylene material. Services of this material were installed principally in the 1970's and 1980's by developers prior to it being deleted as an acceptable water service material by the City. A disproportionate number of leaks were being experienced on these types of services. Since that time, the Water Department has conducted a limited program to replace these services when they fail and to proactively replace them before they fail, subject to the availability of funding.

In the Scripps Ranch and Tierrasanta communities where the fire damage occurred, the residences have primarily polybutylene water services. It is estimated that a small number of residences have standard copper services. It is recommended that the Water Department be directed to provide for polybutylene water service replacements and upgrades on a prioritized basis in these communities. It is estimated that as many as 550 individual water services will need to be replaced at a cost of approximately $3.3 million. It is noted that services meeting existing size and materials standards would not be replaced at this time.

Monthly Base Water Fee: As noted above, higher monthly base water fees are associated with the larger meter sizes. These base fee amounts have been adopted by Council and are based on apportionments of water system costs associated with the relative size of the service connections ranging from residential meters of less than 1-inch up to 16-inch industrial meters. It is recommended that the base monthly water fee schedule for Single Family Residences allow such customers to increase meter and service sizes without incurring a corresponding base fee increase if the increased water meter and service size is solely due to the installation of a required fire suppression system. Accordingly, single family domestic customers, under these circumstances would pay the prevailing rate of $11.93 per month for a ¾-inch meter compared to $12.75 for a 1- inch meter, $57.04 for a 1/1/2 – inch meter, or $87.81 for a 2-inch meter.

Water Capacity Charges: Pursuant to existing policies there would not be an increase in water capacity charges due to either the City or the San Diego County Water Authority for increasing the water meter service to meet fire sprinkler system requirements for single family residences.

4. Staffing issues:

As part of the proposed changes to the building regulations, staffing increases for plan check and inspection will be proposed within Development Services in FY 05. Costs to fund the positions necessary to implement the changes in the code will be recovered from fees paid by the project applicant. Increases in expenditures of $ 295,050 to cover the additional positions will be offset by revenue from a flat fee of $150 for "Fire Sprinkler System - Single

Family/Duplex Dwelling Unit" submitted under a master plan, or a flat fee of $270 for "Fire Sprinkler System – Custom Homes".

ALTERNATIVE(S)

1. Changes in Building Code roof covering requirements throughout the City:

   a) Make no changes to the Building Code requirements for new roofs or re-roofs.

2. Do not prohibit the use of wood shake or wood shingle roof coverings on new roofs and re-roofs in the City of San Diego. Fire resistant construction adjacent to High Fire Hazard Areas.

   a) Make no changes to the City Code requirements for construction adjacent to High Fire Hazard Areas.
   b) Provide additional defensible space and improved fire fighting capabilities in lieu of improved building construction requirements.
   c) Adopt some but not all of the proposed building standards.

3. Do not direct the City Manager to provide for the accelerated upgrade of polybutylene services in the fire impacted areas.

4. Do not direct the City Manager to develop a base monthly water fee schedule for Single Family Residences that allows such customers to increase meter and service sizes without incurring a corresponding base fee increase.

Respectfully submitted,

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P. Lamont Ewell
Assistant City Manager

EWELL/AMF

Note: The attachments are not available in electronic format. A copy is available for review in the Office of the City Clerk.

Attachment(s):
1. Proposed Building Regulations
2. Proposed fee ordinance
3. Exhibit of potential High Fire Hazard Areas
4. Re-roofing Cost Estimates
5. Fee schedule